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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,609	10/31/2005	Wayne Gregory Mitchell	WAT-PT003	2256
3624	7590	12/12/2007		
VOLPE AND KOENIG, P.C. UNITED PLAZA, SUITE 1600 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			EXAMINER BEACH, THOMAS A	
			ART UNIT 3671	PAPER NUMBER
			MAIL DATE 12/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/536,609

Applicant(s)

MITCHELL, WAYNE GREGORY

Examiner

Thomas A. Beach

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Objections

1. Claims 1-17 are objected to because of the following informalities: the phrase "or the like therein" in claim 1 render the claims indefinite. Appropriate correction is required.
2. Dependent claims 19-22 and 24-32 are objected to because of the following informalities: they are method claims that requires steps within the claims to be considered proper method claims; as recited they appear to be apparatus claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans 3,203,188 or Rivard 4,812,078 or Lopata 6,981,342. Evans, Rivard and Lopata show apparatus/method for forming a trench and preparing a base region of the trench for laying an elongate member such as a pipeline or cable (L, 6, 4, respectively), the apparatus including a trench forming machine having excavating means (A, 15, 3, respectively) adapted to excavate the trench as the trench forming machine is moved in a forward direction, bedding material forming means positionable, in use, at least partly above the trench formed by the excavating means of the trench forming machine and being adapted to move simultaneously along the trench with the trench forming machine as the trench forming machine moves in the forward direction, the apparatus further including conveyor means (15, 47, 7/8/10, respectively) for conveying at least a portion of excavated trench material created by the excavating means immediately after excavation to the bedding material (P, 41, 18, respectively) forming means, the bedding material forming means including separation means for separating fine particulate material from the excavated trench material delivered thereto by the conveyor means whereby the fine particulate material is adapted to be delivered to the base region of the trench (fig 1, fig 1, fig 1, respectively).

As concerns claim 2, Evans, Rivard and Lopata show the bedding material forming means forms an integral part of the trench forming machine (fig 1, fig 1, fig 1, respectively).

As concerns claim 3, Evans, Rivard and Lopata show bedding material forming means is separate from the trench forming machine but in use is pulled along the trench by connection means to the trench forming machine (fig 1, fig 1, fig 1, respectively).

As concerns claim 4, Evans, Rivard and Lopata show the connection means includes at least one or more cable or chain extending between the trench forming machine and the bedding material forming means (fig 1, fig 1, fig 1, respectively).

As concerns claim 5, show the at least one cable or chain is angled downwardly from the trench forming machine to the bedding material forming means with a connection of the at least one cable(s) or chain(s) to the bedding material forming means being below an upper edge of the trench(fig 1, fig 1, fig 1, respectively).

As concerns claim 6, Evans, Rivard and Lopata show the conveyor means includes a first conveyor extending transversely relative to the trench the first conveyor being positioned to receive the excavated trench material from the excavating means and to deliver same at a downstream end of the first conveyor to a second conveyor extending rearwardly to the bedding material forming means (fig 1, fig 1, fig 1, respectively).

As concerns claim 7, Evans, Rivard and Lopata show the first conveyor is made up of at least one or more individual conveyor units (fig 1, fig 1, fig 1, respectively).

As concerns claim 8, Evans, Rivard and Lopata show the second conveyor is made up of at least one or more individual conveyor units (fig 1, fig 1, fig 1, respectively).

As concerns claim 9, Evans, Rivard and Lopata show baffle means (CS, 59, 8, respectively) is provided adjacent the downstream end of the first conveyor whereby excavated material on the first conveyor is deposited on the baffle means if the first conveyor is moved at a speed above a first predetermined limit, and onto the second conveyor if the speed of the first conveyor is below the first predetermined limit, the baffle means being configured to deliver excavated material deposited thereon to a ground position adjacent the trench.

As concerns claim 10, Evans, Rivard and Lopata show including control means to vary the speed of the first conveyor to thereby selectably vary the amount of excavated trench material delivered by the second conveyor to the pipeline bedding material forming means (inherent to all the devices that one can control the rate of excavation and speed according to varying ground conditions).

As concerns claim 11, Evans, Rivard and Lopata show the trench forming machine includes scraper means arranged to push excavated material thrown out of the trench by the excavating means back into the trench to be reprocessed by the excavating means (fig 1, fig 1, fig 1, respectively).

As concerns claim 12, Evans, Rivard and Lopata show the trench forming machine is supported on crawler track means on either side of the trench being formed by the excavating means, the scraper means (46, 28, unnumbered in fig 1, respectively) being formed by ground engagable scraper blades positioned rearwardly of each crawler track means and adjacent to the excavating means.

As concerns claim 13, Evans, Rivard and Lopata show the pipeline bedding material forming means includes a structure positionable in the trench and configured to enable movement along the trench, the structure having a lower region adapted to receive the fine particulate material from the separation means and a lower face leading from the lower region through which the fine particulate material is discharged into a bottom region of the trench (fig 1, fig 1, fig 1, respectively).

As concerns claim 14, Evans, Rivard and Lopata show including adjustable levelling means located rearwardly of the discharge of fine particulate material from the lower region of the structure to adjust the depth of the fine particulate material in the trench(due to the pivotal connections of the cutters and bedding material distributors in fig 1, fig 1, fig 1, respectively).

As concerns claim 15, Evans, Rivard and Lopata show the separating means includes a vibrating screen table that is wider than the trench and is inclined to one side whereby the excavated material deposited thereon that does not pass through the screen table drops from the screen table on the one side to a ground position (fig 1, fig 1, fig 1, respectively).

As concerns claim 16, Evans, Rivard and Lopata show support skids are positioned to engage the ground on either side of the trench and on either side of the bedding material forming means in front of any excavated material falling from the vibrating screen table (unnumbered in fig 1, fig 1, fig 1, respectively).

As concerns claim 17, Evans, Rivard and Lopata show the height of the support skids relative to the structure within the trench is adjustable (fig 1, fig 1, fig 1, respectively).

As concerns claim 19, Evans, Rivard and Lopata show the separation apparatus includes a portion located in the trench, the portion including means for distributing and levelling the fine particulate material in the base region of the trench (fig 1, fig 1, fig 1, respectively).

As concerns claim 20, Evans, Rivard and Lopata show the means for distributing and levelling the fine particulate material in the base region of the trench includes means for creating a groove in the fine particulate material into which the elongate member is laid (fig 1, fig 1, fig 1, respectively).

As concerns claim 21, Evans, Rivard and Lopata show a portion of the excavated ground material is selectably deposited onto the ground adjacent the trench instead of being conveyed to the separation apparatus (fig 1, fig 1, fig 1, respectively).

As concerns claim 22, Evans, Rivard and Lopata show coarser particulate material of the excavated ground material that is not deposited into the base region of the trench is discharged from the separation apparatus onto the ground adjacent the trench (fig 1, fig 1, fig 1, respectively).

As concerns claim 24, Evans, Rivard and Lopata show the elongate member is a pipeline or conduit of continuous length or of joined separate sections (fig 1, fig 1, fig 1, respectively).

As concerns claim 25, Evans, Rivard and Lopata show the first separation apparatus is part of or operationally connected to the trench forming machine (fig 1, fig 1, fig 1, respectively).

As concerns claim 26, Evans, Rivard and Lopata show the first separation apparatus includes a portion located in the trench, the portion including means for distributing and levelling the fine particulate material in the base region of the trench (fig 1, fig 1, fig 1, respectively).

As concerns claim 27, Evans, Rivard and Lopata show the means for distributing and levelling the fine particulate material in the base region of the trench includes means for creating a groove in the fine particulate material into which the elongate member is laid (fig 1, fig 1, fig 1, respectively).

As concerns claim 28, Evans, Rivard and Lopata show a portion of the excavated ground material is selectably deposited onto the ground adjacent, the trench instead of being conveyed to the first separation apparatus (fig 1, fig 1, fig 1, respectively).

As concerns claim 29, Evans, Rivard and Lopata show coarser particulate material of the excavated ground material that is not deposited into the base region of the trench is discharged from the first separation apparatus onto the ground adjacent the trench (fig 1, fig 1, fig 1, respectively).

As concerns claim 30, Evans, Rivard and Lopata show the excavated ground material deposited on the ground is at least partially picked up and delivered to the second separation apparatus (fig 1, fig 1, fig 1, respectively).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

December 9, 2007

THOMAS A. BEACH
Primary Examiner
Group 3600